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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,267	04/20/2004	Gidon Elazar	SNDK 428US1	2409
66785 7590 06/27/2008 DAVIS WRIGHT TREMAINE LLP - SANDISK CORPORATION 505 MONTGOMERY STREET SUITE 800 SAN FRANCISCO, CA 94111				
EXAMINER				
DAY, HERNG DER				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/827,267

Applicant(s)

ELAZAR ET AL.

Examiner

HERNG-DER DAY

Art Unit

2128

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20, 22-31 and 55-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20, 22-31 and 55-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This communication is in response to Applicants' RCE and Response ("Response") to Office Action dated June 18, 2007, filed April 9, 2008.

1-1. Claims 1 and 20 have been amended. Claims 32-54 have been withdrawn. Claims 55-58 have been added. Claims 1-20, 22-31, and 55-58 are pending.

1-2. Claims 1-20, 22-31, and 55-58 have been examined and rejected.

Claim Objections

2. Claim 58 is objected to because the extra "T" at the beginning of claim 58 should be removed. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 12, 18-20, 22, 30, and 55-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Debling, U.S. Patent 7,031,903 B2 issued April 18, 2006, and filed October 16, 2001, in view of MPEP 2144.04(V)(B) routine expedients of making integral and further in view of Yang, U.S. Patent 6,733,329 B2 issued May 11, 2004, and filed August 21, 2002.

4-1. Regarding claim 1, Debling discloses a web server emulation device for serving web content, the web server emulation device adapted to be coupled to a digital appliance for end use of at least part of the web content, the web server emulation device comprising:

one or more non-volatile storages for storing at least part of the web content (The on-chip memory circuitry 721 may comprise flash-memory, column 5, lines 20-32);

one or more interfaces, coupled to at least one of the nonvolatile storages, the one or more interfaces for receiving and sending at least part of the web content (an on-chip Ethernet interface 740, column 5, lines 20-32), and

one or more agents for preparing web content to be served the digital appliance (using embedded web server processes, column 5, lines 41-43; the chip 100 includes an “on-chip emulator” which comprises storage and processing circuitry, column 3, lines 54-61), wherein at least part of the web content is served the digital appliance (a host computer system 800, column 5, lines 20-32) for end use of the web content (information processed by the embedded web server process is web content).

Debling fails to expressly disclose the web server emulation device is a portable storage device. Nevertheless, Debling discloses the on-chip memory circuitry 721 may comprise flash-memory (column 5, lines 20-32) for storage need.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Debling to incorporate the legal precedent teachings of making integral to combine the communication device 700 and the target chip 100 as a single device because it is considered to be a routine expedient.

Yang discloses a USB flash drive with built-in controller and flash memory currently has max. 1 gigabyte storage capacity (column 1, lines 17-25). A USB flash drive is a multifunctional device to enlarge the application scope of the mobile storage device (column 1, lines 54-56). Furthermore, a USB flash drive utilizes a detachable interconnector to reach a smooth data transfer between USB interfaces of different specifications (column 1, lines 57-60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Debling to incorporate the teachings of Yang to obtain the invention as specified in claim 1 because a USB flash drive may enlarge the application scope of the mobile storage device and reach a smooth data transfer between USB interfaces of different specifications.

4-2. Regarding claim 2, Debling further discloses wherein the web server emulation device is coupled to the digital appliance (a host computer system 800, column 5, lines 20-32).

4-3. Regarding claim 3, Debling further discloses wherein the digital appliance is a computer (a host computer system 800, column 5, lines 20-32).

4-4. Regarding claim 12, Debling further discloses wherein the web server emulation device couples to the digital appliance via a physical connection to the digital appliance (The Ethernet port 750 connects to the host via a direct link 751, column 5, lines 20-32).

4-5. Regarding claim 18, Debling further discloses wherein said one or more agents prepare web content to be served by using information received from the coupled digital appliance (move certain selected processes from the host onto the on-chip processing circuitry 720, column 5, lines 41-53).

- 4-6.** Regarding claim 19, Debling further discloses wherein said one or more agents obtain web content from a remote server (Use of the telephone line port enables Internet connection, column 5, lines 61-67).
- 4-7.** Regarding claim 20, the system claim includes equivalent method limitations as in claim 1 and is unpatentable using the same analysis of claim 1.
- 4-8.** Regarding claim 22, Debling further discloses wherein the digital appliance comprises:
a interface whereby the web server emulation device can be coupled to the digital appliance (port 850, FIG. 3); and
middleware by which the digital appliance dispatches request to, and gathers responses from, one or more of said agents by said interface whereby the web server emulation device can be coupled to the digital appliance (a proxy process on the host, column 4, lines 31-40).
- 4-9.** Regarding claim 30, Yang further discloses wherein the web server emulation device is a USB flash drive portable storage device (the USB flash drive ... includes a mobile storage device 2 and at least one interconnector 3, column 2, lines 22-32).
- 4-10.** Regarding claim 55, Yang further discloses wherein the web server emulation device is a USB flash drive (the USB flash drive ... includes a mobile storage device 2 and at least one interconnector 3, column 2, lines 22-32).
- 4-11.** Regarding claim 56, Yang further discloses wherein the web server emulation device is a removable flash storage media (the USB flash drive ... includes a mobile storage device 2 and at least one interconnector 3, column 2, lines 22-32).
- 4-12.** Regarding claims 57 and 58, the system claim includes equivalent method limitations as in claims 55 and 56 and are unpatentable using the same analysis of claims 55 and 56.

5. Claims 4-11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Debling, U.S. Patent 7,031,903 B2 issued April 18, 2006, MPEP 2144.04(V)(B) routine expedients of making integral, and Yang, U.S. Patent 6,733,329 B2 issued May 11, 2004, in view of Applicants' admission.

5-1. Regarding claims 4 and 5, Debling discloses a web server emulation device in claim 1. Debling fails to expressly disclose wherein the digital appliance is a personal digital assistant or a mobile phone.

Applicants assert in the specification at page 2, line 20 through page 3, line 2, "Web pages may be displayed on a client computing device (hereafter Client Digital Appliance) such as PC, laptops, PDA, mobile phone and any other computational device that can connect to the Internet." In other words, a personal digital assistant or a mobile phone may be used to display web pages.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Debling to incorporate Applicants' admission to obtain the invention as specified in claims 4 and 5 because using a personal digital assistant or a mobile phone to display web pages would provide improved mobility for a user than using a host computer system.

5-2. Regarding claims 6-11, Debling discloses a web server emulation device in claim 1. Debling fails to expressly disclose wherein the web content is a web page, streamed content, an electronic book, a document, an HTML form, or a multimedia file.

Applicants assert in the specification at page 3, lines 12-21, "The content sent to the browser can be of several types and formats. It can be static, such as a text file or an image file;

HTML (Hyper Text Markup Language) is frequently used to describe static information on a web page. Other types can be streamed data, such as video and audio, which are transmitted as a stream composed of chunks of information, then processed and rendered as received. Another type of information can be a file such as text, video, audio, games, programs, Java applets, or ActiveX controls, all of which may be downloaded from web server to client. Still another format can be user-input dependant and is determined by information sent from client to server, for example a "search" command requested by the client triggers a process in the server to dynamically produce the information to be rendered."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Debling to incorporate Applicants' admission to obtain the invention as specified in claims 6-11 because web content can be of several types and formats in a client/server environment would provide more options to meet a user's requirement.

5-3. Regarding claim 17, Debling discloses a web server emulation device in claim 1.

Debling fails to expressly disclose the one or more non volatile storages further comprising a hidden-from-user storage area used to store at least part of the web content, wherein said one or more agents control access to the hidden-from-user storage area.

Applicants assert in the specification at page 6, lines 9-11, "In a true online client/server scenario, part of the data and programs on the server are not accessible by the client." In other words, a hidden-from-user storage area is used to store at least part of the web content.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Debling to incorporate Applicants' admission to obtain the

invention as specified in claim 17 because with a hidden-from-user storage area would improve the security and privacy.

6. Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Debling, U.S. Patent 7,031,903 B2 issued April 18, 2006, MPEP 2144.04(V)(B) routine expedients of making integral, and Yang, U.S. Patent 6,733,329 B2 issued May 11, 2004, in view of Official Notice.

6-1. Regarding claims 13-16, Debling discloses a web server emulation device in claim 1. Specifically, Debling discloses a direct link 751 to connect the host and the Ethernet port 750 of the communication device 700.

Debling fails to expressly disclose wherein the physical connection includes one or more cables and wherein the web server emulation device couples to the digital appliance by directly physically, remotely, or wirelessly connecting to the digital appliance.

“Official Notice” is taken that both the concept and the advantages of using the various connections for establishing the coupling between the web server emulation device and the digital appliance to meet specific requirement are well known and expected in the art. For example, when the web server emulation device and the digital appliance are located at different cities, it is well known and expected that a physically direct connection is impossible.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the direct link 751 of Debling with one of the well known connections to meet specific requirement.

7. Claims 23-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Debling, U.S. Patent 7,031,903 B2 issued April 18, 2006, MPEP

2144.04(V)(B) routine expedients of making integral, and Yang, U.S. Patent 6,733,329 B2 issued May 11, 2004, in view of Bowman-Amuah, U.S. Patent 6,742,015 B1 issued May 25, 2004, and filed August 31, 1999.

7-1. Regarding claims 23-29, Debling discloses a web server emulation system in claim 22.

Debling fails to expressly disclose the various functions of a middleware and how the middleware can be identified.

Bowman-Amuah discloses at columns 56 and 57, "There is a definite functionality overlap between communications middleware and several other middleware components such as transaction services and information access", "Communications middleware can translate data into a format that is compatible with the receiving process", "Communications middleware can provide additional communications services that may be required by the applications", "The simplified interface associated with communications middleware can help to reduce the complexity of developing Netcentric applications", and "Communication middleware allows the client application to access any service on any physical server in the network without needing to know where it is physically located". In other words, because the middleware, e.g., communications middleware, allows the client application to access any service on any physical server in the network without needing to know where it is physically located, identifying the middleware by specific address or port as a network node is necessary and obvious.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Debling to incorporate the teachings of Bowman-Amuah to obtain the invention as specified in claims 23-29 because the above-mentioned various functions cannot be provided if the middleware cannot be identified and located.

8. Claims 1 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Debling, U.S. Patent 7,031,903 B2 issued April 18, 2006, and filed October 16, 2001, in view of MPEP 2144.04(V)(B) routine expedients of making integral and further in view of Kuo, U.S. Patent Application Publication No. 2003/0185083 A1 published October 2, 2003, and filed March 27, 2002.

8-1. Regarding claim 1, Debling discloses a web server emulation device for serving web content, the web server emulation device adapted to be coupled to a digital appliance for end use of at least part of the web content, the web server emulation device comprising:

one or more non-volatile storages for storing at least part of the web content (The on-chip memory circuitry 721 may comprise flash-memory, column 5, lines 20-32);

one or more interfaces, coupled to at least one of the nonvolatile storages, the one or more interfaces for receiving and sending at least part of the web content (an on-chip Ethernet interface 740, column 5, lines 20-32), and

one or more agents for preparing web content to be served the digital appliance (using embedded web server processes, column 5, lines 41-43; the chip 100 includes an “on-chip emulator” which comprises storage and processing circuitry, column 3, lines 54-61), wherein at least part of the web content is served the digital appliance (a host computer system 800, column 5, lines 20-32) for end use of the web content (information processed by the embedded web server process is web content).

Debling fails to expressly disclose the web server emulation device is a portable storage device. Nevertheless, Debling discloses the on-chip memory circuitry 721 may comprise flash-memory (column 5, lines 20-32) for storage need.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Debling to incorporate the legal precedent teachings of making integral to combine the communication device 700 and the target chip 100 as a single device because it is considered to be a routine expedient.

Kuo discloses, "Flash memory is ideal for dozens of portable applications. It is more flexible than a floppy and is faster than a hard drive. A flash storage is more rugged, which is able to tolerate severe shock and vibration without losing data. A flash storage card is also designed with solid state components, which save power and consume less energy" (column 1, paragraph [0004]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Debling to incorporate the teachings of Kuo to obtain the invention as specified in claim 1 because a flash storage card may save power and consume less energy.

8-2. Regarding claim 31, Kuo further discloses the web server emulation device is a memory card type portable storage device (FIG. 1).

Applicants' Arguments

9. Applicants argue the following:

(1) "claim 1 has been amended (with a similar change to claim 20) to specify that "the web server emulation device is a portable storage device" [emphasis added]; that is, a single device, which is directly contradictory to the Office Action's comments that the "Examiner

considers the target chip 100 together with the connected communication device as the claimed web server emulation device.”” (page 11, paragraph 1, Response)

(2) “In addition to the error of “target chip 100” being a separate device, the Office Action does not indicate how its inclusion affects the actual basis of the rejection of claim 1.” (page 11, paragraph 2, Response)

(3) “it is respectfully submitted that a rejection of independent claims 1 and 20 (along with dependent claims 2-19 and 22-31) under 35 U.S.C. §102(e) as being anticipated by Debling (or §103(a) with Debling as the primary reference) is in error and should be withdrawn.” (page 14, paragraph 2, Response)

Response to Arguments

10. Applicants’ arguments have been fully considered.

10-1. Applicants’ arguments (1)-(2) are not persuasive. Debling discloses, “using embedded web server processes” (column 5, lines 41-43) and “the chip 100 includes an “on-chip emulator” which comprises storage and processing circuitry” (column 3, lines 54-61), which anticipate the recited limitation, “one or more agents for preparing web content to be served the digital appliance”. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Debling to incorporate the legal precedent teachings of making integral to combine the communication device 700 and the target chip 100 as a single device because it is considered to be a routine expedient.

10-2. Applicants’ argument (3) is moot in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Herng-der Day whose telephone number is (571) 272-3777. The Examiner can normally be reached on 9:00 - 17:30.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: (571) 272-2100.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Kamini S. Shah can be reached on (571) 272-2279. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kamini S Shah/

Supervisory Patent Examiner, Art Unit 2128

/Herng-der Day/
Examiner, Art Unit 2128

June 22, 2008

